AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/589,249

Attorney Docket No.: Q95397

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

## LISTING OF CLAIMS:

1. (currently amended): An olefin polymerization catalyst represented by general formula (1), (2), or (3):

$$R_{f1}$$
 $R_{f2}$ 
 $R_{f2}$ 
 $R_{f3}$ 
 $R_{f2}$ 

(1)

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$$R_3$$
 $R_1$ 
 $R_1$ 
 $R_2$ 
 $R_1$ 

(2)

$$R_3$$
 $R_2$ 
 $R_1$ 

(3)

(wherein M is nickel, palladium, or platinum; E is oxygen or sulfur; X is phosphorus, arsenic, or antimony; R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> are each independently hydrogen or a hydrocarbon group having 1 to 20 carbon atoms;  $R_{f1}$  and  $R_{f2}$  are each independently a fluorine atom or a fluorohydrocarbon group having 1 to 20 carbon atoms; F is fluorine; and m is 1 to 3).

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2. (original): The olefin polymerization catalyst according to claim 1, wherein M is nickel.

3. (currently amended): The olefin polymerization catalyst according to claim 1, wherein E is oxygen, and X is phosphorus.

4. (currently amended): The olefin polymerization catalyst according to claim 1, wherein  $R_{\rm fl}$  and  $R_{\rm f2}$  are each a fluorohydrocarbon group having 1 to 20 carbon atoms.

5. (original): The olefin polymerization catalyst according to claim 4, wherein  $R_{fl}$  is a trifluoromethyl group, and  $R_{f2}$  is a pentafluorophenyl group.

6. (currently amended): The olefin polymerization catalyst according to claim 1, wherein  $R_1$ ,  $R_2$ , and  $R_3$  are each a phenyl group.

7. (currently amended): The olefin polymerization catalyst according to claim 6, represented by general formula (4):

(4)

(wherein Ph represents a phenyl group).

8 and 9. (canceled).

- 10. (currently amended): A method for producing the olefin polymerization catalyst according to claim 1.
- 11. (currently amended): A method for producing <u>anthe</u> olefin polymer-according to claim 8 by polymerizing an olefin in the presence of an olefin polymerization catalyst represented by general formula (1), (2), or (3):

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$$\begin{array}{c|c} R_3 \\ \hline E & M \\ R_{f1} & R_2 \\ \hline R_{f2} & R_1 \end{array}$$

(1)

$$R_3$$
 $R_2$ 
 $R_1$ 
 $R_1$ 

(2)

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$$R_3$$
 $R_2$ 
 $R_1$ 

(3)

wherein M is nickel, palladium, or platinum; E is oxygen or sulfur; X is phosphorus, arsenic, or antimony;  $R_1$ ,  $R_2$ , and  $R_3$  are each independently hydrogen or a hydrocarbon group having 1 to 20 carbon atoms;  $R_{f1}$  and  $R_{f2}$  are each independently a fluorine atom or a fluorohydrocarbon group having 1 to 20 carbon atoms; F is fluorine; and m is 1 to 3.